WHAT IS CLAIMED IS:

- 1. (Currently Amended) An integrated process for the treatment and valorization of organic waste, said process comprising the steps of:
- a) treating said organic waste with a microorganism treatment for producing gas;
- b) separating the organic waste resulting from step a) into a liquid fraction and a solid fraction; and
- c) using the liquid fraction resulting from step b) as a fertilizer wherein the process is carried out at atmospheric pressure.
- 2. (Original) The process of claim 1, wherein said microorganism is a bacterium.
- 3. (Original) The process of claim 1, wherein said microorganism treatment is an anaerobic bacterial treatment.
- 4. (Original) The process of claim 1, wherein said organic waste is animal manure.
- 5. (Original) The process of claim 1, wherein said animal manure is swine manure.
- 6. (Original) The process of claim 1, further comprising a step of drying the solid fraction resulting from step b) between step b) and step c) or after step c).
- 7. (Original) The process of claim 1, further comprising a step of burning the solid fraction resulting from step b) between step b) and step c) or after step c).
- 8. (Original) The process of claim 1, further comprising a step of using said gas resulting from step a) as an energy source.
- 9. (Original) The process of claim 9, wherein said energy source is for at least one of electricity generation and heat generation.
- 10. (Original) The process of claim 8, further comprising a step of purifying said gas resulting from step a) before the step of using said gas as an energy source.

- 11. (Original) The process of claim 10, wherein said step of purifying consist in the reduction of hydrogen sulfide content from said gas.
- 12. (Original) The process of claim 11, wherein said reduction varies between 60% and 85% for a full digestion cycle.
- 13. (Original) The process of claim 11, wherein said reduction is of about 85% for a full digestion cycle.
- 14. (Original) The process of claim 1, wherein said solid fraction resulting from step b) is used as an energy source.
- 15. (Original) The process of claim 14, wherein said energy source is for at least one of electricity generation and heat generation.
- 16. (Currently Amended) Use of a A liquid fraction obtained from the solid liquid separation of an organic waste previously treated by a microorganism treatment for use as a fertilizer.
- 17. (Currently Amended) The use <u>liquid fraction</u> as claimed in claim 16, wherein said microorganism is a bacterium.
- 18. (Currently Amended) The use <u>liquid fraction</u> as claimed in claim 16, wherein said treatment is an anaerobic bacterial treatment.
- 19. (Currently Amended) The use <u>liquid fraction</u> as claimed in claim 16, wherein said organic waste is animal manure.
- 20. (Currently Amended) The use <u>liquid fraction</u> as claimed in claim 19, wherein said animal manure is swine manure.